

WHAT IS CLAIMED IS:

1. A weak light color imaging device for capturing color images of the weak light from a subject, characterized by comprising:

5 illuminating means for illuminating said subject;

exciting means for causing fluorescence to be generated by irradiating excitation light onto said subject;

10 filtering means for respectively transmitting the red, green and blue wavelength components of the weak light from said subject;

amplifying means for amplifying the light intensity of the respective red, green and blue 15 wavelength components of the weak light from said subject as transmitted by said filtering means;

imaging means for capturing images of the respective red, green and blue wavelength components of the amplified light from said subject;

20 storing means for storing image signals of the respective red, green and blue wavelength components thus captured;

25 converting means for superimposing the image signals for said red, green and blue wavelength components stored by said storing means, and converting same to a color image signal;

monitoring means for displaying said color image signal as a color image; and output varying means for varying the output of said illuminating means.

5 2. The weak light color imaging device according to claim 1, characterized in that said output varying means varies the output of said illuminating means in such a manner that the intensity of the light from said illuminating means incident on said imaging means due 10 to reflection or scattering by said subject is equal to or less than the light intensity of the fluorescence incident on said imaging means from said subject.

15 3. The weak light color imaging device according to claim 1, characterized in that said filtering means transmits a greater quantity of said red wavelength component of the weak light from said subject than said blue and green wavelength components.

20 4. The weak light color imaging device according to claim 3, characterized in that said filtering means transmits a greater quantity of said red wavelength component of the weak light from said subject than said blue and green wavelength components, by transmitting said red wavelength component for a longer period of time than said blue and green wavelength components.

25 5. The weak light color imaging device according to claim 3, characterized in that said filtering means

transmits a greater quantity of said red wavelength component of the weak light from said subject than said blue and green wavelength components, by transmitting said red wavelength component at a higher  
5 transmissivity than said green and blue wavelength components.

6. The weak light color imaging device according to claim 1, characterized in that said filtering means also transmits a wavelength component in the infrared  
10 region.